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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,471	09/30/2003	Martin Antoni	90706	5544

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CHICAGO, IL 60606

EXAMINER

CHERRY, EUNCHA P

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/675,471

Applicant(s)

ANTONI ET AL.

Examiner

EUNCHA P. CHERRY

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 37-39 is/are rejected.
- 7) ☒ Claim(s) 8-36 and 40-50 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/950,186.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: there are blocks shown in pages 11 and 12, which require clarification.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-7 and 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smyth (US Patent No. 4,333,446) in view of Laing et al (US Patent No. 3,806,209).

Regarding claims 1-7 and 38, Smyth discloses a focusing device (Figs. 1 and 2) for the radiation from a light source (sun), comprising a collector mirror (48) which is held by a mount (16) and which collects the light from the light source at its focus (see the shape of 48), in virtual or real terms,

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wherein said collector mirror can be adjusted or displaced in said mount via a bearing in such way that optical properties of the collector mirror remain at least approximately the same in the event of temperature changes (see column 2, lines 50-63). The bearing is designed in such way that said collector mirror can be displaced at least perpendicular to the optical axis in the region of its bearing (see Fig. 2). The mount is designed as a mounting ring in which said collector mirror with its bearing is held (see Fig. 2). A plurality of bearings are arranged, distributed over the circumference, in strengthening ribs of said mounting ring (see Fig. 2, 42). The bearings of the collector mirror are provided with elements, which permit movements of said collector mirror perpendicular an optical axis (see Fig. 2). The elements are designed as active adjusting units (inherent). The intended use recited in the preamble does not get patentable weight for claim 38. However, Smyth does not disclose automatically adjusted bearing that responses to thermal load. Laing et al discloses the automatically adjusted bearing that responses to thermal load (column 2, lines 3-11). It would have been obvious to one of ordinary skill in the art to use the bearing as taught by Laing et al for the purpose of obtaining radiation without any dissipation.

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Regarding claims 37 and 39, Smyth in view of Laing et al discloses the claimed invention as set forth above except for the light source being plasma EUV. It would have been obvious to one of ordinary skill in the art to use the solar collector in a system where the light source is a plasma EUV, because using the solar collector of Smyth will result in getting signal that can be controlled individually verse as one unit.

Allowable Subject Matter

4. Claims 8-36 and 40-50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter: claims are allowable at least for the reason that the prior art does not teach or suggest the annular shells that are hold jointly in bearings on a mount designed as a mounting ring (claims 8-36) and the shell collector is a plurality of annular shells arranged at a radial distance from one another (claims 40-50) as set forth in the claimed combination.

Response to Arguments

5. Applicant's arguments with respect to claims have been considered but found not persuasive. Applicant argues the

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amended claims of the present invention require support means instead of a bearing. However, support means of the present invention is a bearing as described in the specification. Therefore, it appears that the rejection is still deemed proper.

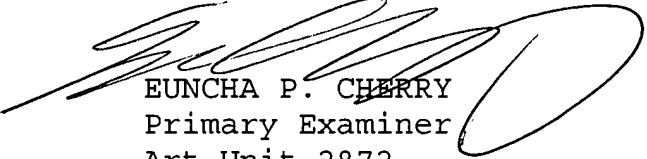
Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EUNCHA P. CHERRY whose telephone number is 571-272-2310. The examiner can normally be reached on M-F 6:30-4:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DREW DUNN can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



EUNCHA P. CHERRY
Primary Examiner
Art Unit 2872

8/7/06